



**BARRIE D. COATE  
and ASSOCIATES**

Horticultural Consultants  
23535 Summit Road  
Los Gatos, CA 95033  
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ATTACHMENT E  
Page 1 of 18

**EVALUATION OF TREES AT THE  
SOUTHBAY CHRISTIAN CENTER  
521 E. WEDDELL DRIVE  
SUNNYVALE**

Prepared at the request of:  
Brian Pendley  
Pendley & Associates  
9008 Siegal Street  
Valley Springs, CA 95252

Prepared by:  
Michael L. Bench  
Consulting Arborist  
August 4<sup>th</sup>, 2005

Job # 08-05-157 Site I

**Assignment**

I was asked by Mr. Jonathon Stone to evaluate the trees located at 521 E. Weddell Drive, Sunnyvale, California, and to prepare a Tree Protection Plan concerning the proposed construction to remodel the exterior of the existing building and to modify portions of the landscape.

The plan referred to for this evaluation is the Site Plan, prepared by Pendley and Associates, Valley Springs, California, Sheet A1, dated 7-20-05.

**Summary**

There are 36 trees on this site or adjacent to the property boundary of this site that may be exposed to some level of damage by proposed construction.

All of the trees are identified in this report and given a condition rating. Some trees and/or circumstances concerning them are briefly described.

The "Significant" trees, as defined by City of Sunnyvale, are Trees # 1, 2, 5, 11, 12, 13, 16, 17, 19, 20, 21, 22, 23, 25, 28, 31, 32, 33, and 34. It appears that all of these would be preserved.

Calculation of value of all 36 trees is made according to the International Society of Arboriculture (ISA), Guide for Plant Appraisal, 9<sup>th</sup> Edition. The 31 large trees have a total appraised value of \$121,600. The 4 small trees have a total value of \$4,300. The one palm tree has an appraised value of \$700. Thus, the total appraised value of all 36 trees is \$126,600.

Procedures are recommended here in order to preserve the "Significant" trees in their present condition. Depending on the final design of the proposed sidewalk and depending on the excavation that would be required to construct this sidewalk near individual trees, it may not be feasible to preserve all of the "Significant" trees # 1, 8, 9, 10, 12, 16, 17, 18, 19, 20, 21, 22, or 23.

**Observations**

I inspected the trees on this property on August 4, 2005. I observed that there are 36 trees that may be exposed to some level of risk by the proposed construction. At least 28 of these trees are located on this property. The other 8 trees are located either on this property or adjacent to the property boundary on the east side. I affixed numbered aluminum labels to all of the trees on this property for field reference. The attached map shows the estimated locations of all of these trees and their approximate canopy dimensions. Some of these trees were not included on the plan provided and have been added. The locations of these added trees are approximate.

The 36 trees are classified as follows:

Trees # 1, 2, 3, 16, 17, 18, 22, 23 – Coast redwood (*Sequoia sempervirens*)

Trees # 4, 5, 15, 19, 29 – Chinese elm (*Ulmus parvifolia*)

Trees # 6, 7, 8, 9, 10 – Yarwood sycamore (*Platanus acerifolia* 'Yarwood')

- Trees # 11, 12, 13, 20, 21 – American sweet gum (*Liquidambar styraciflua*)  
 Tree # 14 – Crepe myrtle (*Lagerstroemia indica*)  
 Trees # 24, 25, 26, 27 – St. Mary's magnolia (*Magnolia grandiflora* 'St. Mary's')  
 Tree # 28 – Mexican fan palm (*Washingtonia robusta*)  
 Tree # 30 – Japanese privet (*Ligustrum japonicum*)  
 Trees # 31, 32, 33, 36 – Canary Island pine (*Pinus canariensis*)  
 Trees # 34, 35 – Redbox gum (*Eucalyptus polyanthemos*)

The particulars of these trees (species, trunk diameter, height, spread, and structure) are included in the attachments that follow this text.

The health and structure of each specimen is rated on a scale of 1-5 (Excellent - Extremely poor) on the data sheets attached to this text. Based on these health and structure ratings combined, I have given each tree an overall condition rating as follows:

Excellent	Good	Fair	Poor	Extremely Poor	Dead
Specimens	Specimens	Specimens	Specimens	Specimens	Specimens
2, 4, 6, 8, 9,	1, 3, 7, 19,	5, 30, 32, 33,			
10, 11, 12,	23, 29	35			
13, 14-18,					
20, 21, 22,					
24-28, 31,					
34, 36					

### Comments about Specific Trees

It appears that the irrigation system is not functioning in the area near Tree # 1. Although this specimen, a coast redwood (*Sequoia sempervirens*), is healthy at this time, it will likely decline if the irrigation system near its root zone is not functioning. In fact, all of the coast redwood trees (# 1, 2, 3, 16, 17, 18, 22, 23) may decline sharply unless the irrigation to them is restored immediately. Although Trees # 2 and 3 appear to be located on the neighboring property, they provide an effective screen and are a benefit to this site.

Tree # 5, a Chinese elm (*Ulmus parvifolia*), is suffering from drought stress.

Tree # 19, a Chinese elm (*U. parvifolia*), has a broken limb in the center of the canopy. This can be repaired by corrective pruning. However, it is likely that additional limbs or branches on this tree may break unless it is to be "drop crotch" pruned for endweight removal.

### Protected Trees

The City of Sunnyvale Municipal Code, Section 19.94.030, (3), (4), defines a "protected tree" as "a tree of significant size. "Significant size means a tree thirty-eight inches or greater in circumference (12 inches in diameter) measured four feet above ground for single trunk trees. For multi-trunk trees, significant size means a tree which has at least

one trunk with a circumference thirty-eight inches or greater measured four feet above ground level, or in which the measurements of the circumferences of each of the multi-trunks, when measured four feet above ground level, added together equal an overall circumference one hundred thirteen inches (36 inches in diameter) or greater.”

The “Significant Size” trees at this site are Trees # 1, 2, 5, 11, 12, 13, 16, 17, 19, 20, 21, 22, 23, 25, 28, 31, 32, 33, and 34.

### **Risks to Trees by Proposed Construction**

Tree # 14, a small crepe myrtle (*Lagerstroemia indica*) would be removed. This tree is not a “Significant Size” tree, as defined by city code.

The construction of the proposed new sidewalk may require the removal of trees, including “Significant” trees, at location where they would be in conflict with the sidewalk, unless the sidewalk could be located around the trunks of these trees and could be constructed on top of the existing soil grade. In this event, excavation for a new sidewalk must be minimal, 1 inch in depth or less, except where the new sidewalk must match the elevation of an existing surface. It appears that Trees # 1, 8, 9, 10, 12, 16, 17, 18, 19, 20, 21, and 22 may be at risk. For example, if the sidewalk could be located between Trees # 16 and 17 and could be constructed on grade (for the most part) except where this sidewalk must match the elevation of the concrete path to the west side door, Trees # 16 and 17 would likely survive in good condition, provided that they are adequately irrigated. However, Trees # 16 and 17 are located on a mound. If the sidewalk must be constructed adjacent to the curb, Tree # 17 would be removed and the grading required to match the curb elevation would likely result in severe root loss to Tree # 16. Should this occur, it is unlikely that Tree # 16 would survive.

The proposed removal of the curbing and paving at several locations at this site may result in root loss to the nearby trees. It would be essential that the removal of any curb and paving inside the driplines of the existing trees be done without significantly disturbing the soil, which may contain functional roots of the adjacent trees, directly beneath the paving. One acceptable method would be to saw cut the existing paving and to remove it by hand.

If the proposed new landscape areas would require trenching across the root zones of the existing trees in order to provide irrigation to those areas, the existing trees may be severely damaged, depending on the trenching or excavation required. This may depend a great deal on the locations of the existing water lines and the modifications that would be required.

However, all of the trees at this site would likely be at risk of damage by construction or construction procedures that are common to most construction sites. These procedures may include the dumping or the stockpiling of materials over root systems, or may include construction traffic across the root system resulting in soil compaction and root die back.

If any underground utilities are to be replaced or upgraded, it is essential that the location of the trenches must be planned prior to construction, and that the trees are located precisely at the locations shown on the proposed plans.

### Recommendations

1. At locations where the sidewalk would be constructed inside the driplines of existing trees, I recommend that the sidewalk be constructed on grade and located around the trunks of trees as feasible.
2. I recommend that curb and paving be removed by saw cutting and removing by hand. The soil directly beneath the paving must be wet down and kept wet throughout the construction period. This may be achieved by spreading a 4 inch layer of compost or wood chips over soil either before or after thoroughly wetting down the soil area.
3. If trenching must be done inside the driplines of existing trees, I recommend that this trenching be done by an air spade or by a water jet in combination with hand digging.
4. Roots up to two inches in diameter may be severed, but roots 2 inches in diameter or larger must not be severed.
5. If trenching or excavation must be done inside the driplines of existing trees, these trees must be irrigated for a minimum of 1 year. In this event, I recommend that these trees irrigated at least throughout the entire construction period during the dry months (any month receiving less than 1 inch of rainfall). Irrigate with a minimum of 10 gallons for each inch of trunk diameter every two weeks. A soaker hose or a drip line is preferred for this purpose.
6. If approximately 20% or more of the root zone of a tree would be exposed to trenching or excavation, I recommend that the entire area inside the dripline where soil would be exposed must be mulched. Mulching consists of a protective material (wood chips, gravel ) being spread over the root zone inside the dripline. This material must be 4 inches in depth after spreading, which must be done by hand. I prefer coarse wood chips because it is organic, and degrades naturally over time. Wood chips must be  $\frac{1}{4}$  to  $\frac{3}{4}$  inch in diameter primarily. One supplier is Reuser, Inc., 370 Santana Dr., Cloverdale, CA 95425, (707)894-4224.
7. I recommend that protective fencing be provided to protect Trees # 5, 15, 16 and 17 during the construction period. This fencing must protect a sufficient portion of the root zone to be effective. In most cases, it would be essential to locate the fencing a minimum radius distance of 10 times the trunk diameter in all directions from the trunk. For example, a tree with a trunk diameter of 15 inches dbh (Diameter at 54 inches above grade) would require that protective fencing be

erected 13 feet minimum from the trunk. If hardscape (i.e., curbing, paving, etc.) exists inside this 13 foot radius, the protective fence must be erected at the edge of the hardscape feature and be located at least 13 feet from the trunk (minimum) on all other sides. Occasionally it may be essential to have a certified arborist make decisions about the location(s) of protective fencing at the project site.

I recommend that protective fencing must:

- Consist of chain link fencing and having a minimum height of 6 feet.
- Be mounted on steel posts driven approximately 2 feet into the soil.
- Fencing posts must be located a maximum of 10 feet on center.
- Protective fencing must be installed prior to the arrival of materials, vehicles, or equipment.
- Protective fencing must not be moved, even temporarily, and must remain in place until all construction is completed.

Note: In my experience, less substantial fencing is not respected by contractors.

8. Trenches for any utilities (gas, electricity, water, phone, TV cable, etc.) must be located outside the driplines of protected trees, unless approved by a certified arborist.
9. If any old irrigation lines, drain lines, sewer lines, or any other underground features exist inside the driplines of protected trees, but would not be used, I recommend that they be cut off approximately at soil grade and left in the ground.
10. Materials must not be stored, stockpiled, dumped, or buried inside the driplines of protected trees.
11. Any pruning must be done by an arborist certified by the ISA (International Society of Arboriculture) and according to ISA, Western Chapter Standards, 1998.
12. The sprinkler irrigation must not be designed to strike the trunks of trees.
13. Landscape materials (cobbles, decorative bark, stones, fencing, etc.) must not be installed directly in contact with the bark of trees because of the risk of serious disease infection.

### **Tree Appraisal**

Three methods are used for the appraisal of the 36 trees surveyed for this project: (1) the Trunk Formula Method, typically used for larger trees; (2) Replacement Cost Method, typically used for small trees (4 inches in diameter or smaller), and; (3) the species and installation cost method for appraising palms. These methods are done in accordance with the International Society of Arboriculture (ISA), Guide for Plant Appraisal, 9<sup>th</sup> Edition. Also, the ISA Western Chapter Species Classification Guide is used as part of

EVALUATION OF TREES LOCATED AT SOUTHBAY CHRISTIAN CENTER, 521 E. WEDDELL DRIVE,  
SUNNYVALE

the trunk formula method.

The trunk formula worksheet made available by the ISA is used to complete the appraisal of Trees # 1, as an example of the trunk formula method. However, in the interest of economy, I have applied the trunk formula method to a spreadsheet for the calculation of the other large trees, with the exception of the one palm Tree # 28. This spreadsheet contains all of the steps required by the trunk formula method to achieve the same calculations that would be achieved by the individual worksheet form for the trunk formula method. The value of the 31 trees appraised by the Trunk Formula Method is \$121,600.

A worksheet using the Cost Replacement Method of each of the small trees is included in the attachments. Trees # 6, 7, 8, and 14 have a total value of \$ 4,300.

Tree # 28 is a Mexican fan palm tree (*Washingtonia robusta*). Palm trees are typically sold by the trunk foot. The appraised value is the typical cost per foot (times the trunk height up to 20 feet) plus the estimated installation cost. Tree # 28 has a trunk height of 12 feet (not to be confused with overall height, which includes upright fronds). The *W. robusta* typically sells for about \$ 25 per foot for a single specimen. The cost to plant a single specimen is estimated to be \$ 400. Thus, the appraised value of Tree # 28 is \$ 700.

Respectfully submitted,

Michael L. Bench, Associate

Barrie D. Coate, Principal

MLB/sh

Enclosures:

Assumptions and Limiting Conditions

Map

Tree Value Chart

Tree Chart

Trunk Formula Chart

Replacement Cost Method Chart



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**ATTACHMENT F**

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**ASSUMPTIONS AND LIMITING CONDITIONS**

1. Any legal description provided to the appraiser/consultant is assumed to be correct. No responsibility is assumed for matters legal in character nor is any opinion rendered as to the quality of any title.
2. The appraiser/consultant can neither guarantee nor be responsible for accuracy of information provided by others.
3. The appraiser/consultant shall not be required to give testimony or to attend court by reason of this appraisal unless subsequent written arrangements are made, including payment of an additional fee for services.
4. Loss or removal of any part of this report invalidates the entire appraisal/evaluation.
5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person(s) to whom it is addressed without written consent of this appraiser/consultant.
6. This report and the values expressed herein represent the opinion of the appraiser/consultant, and the appraiser's/consultant's fee is in no way contingent upon the reporting of a specified value nor upon any finding to be reported.
7. Sketches, diagrams, graphs, photos, etc., in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys.
8. This report has been made in conformity with acceptable appraisal/evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.
9. When applying any pesticide, fungicide, or herbicide, always follow label instructions.
10. No tree described in this report was climbed, unless otherwise stated. We cannot take responsibility for any defects which could only have been discovered by climbing. A full root collar inspection, consisting of excavating the soil around the tree to uncover the root collar and major buttress roots, was not performed, unless otherwise stated. We cannot take responsibility for any root defects which could only have been discovered by such an inspection.

**CONSULTING ARBORIST DISCLOSURE STATEMENT**

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

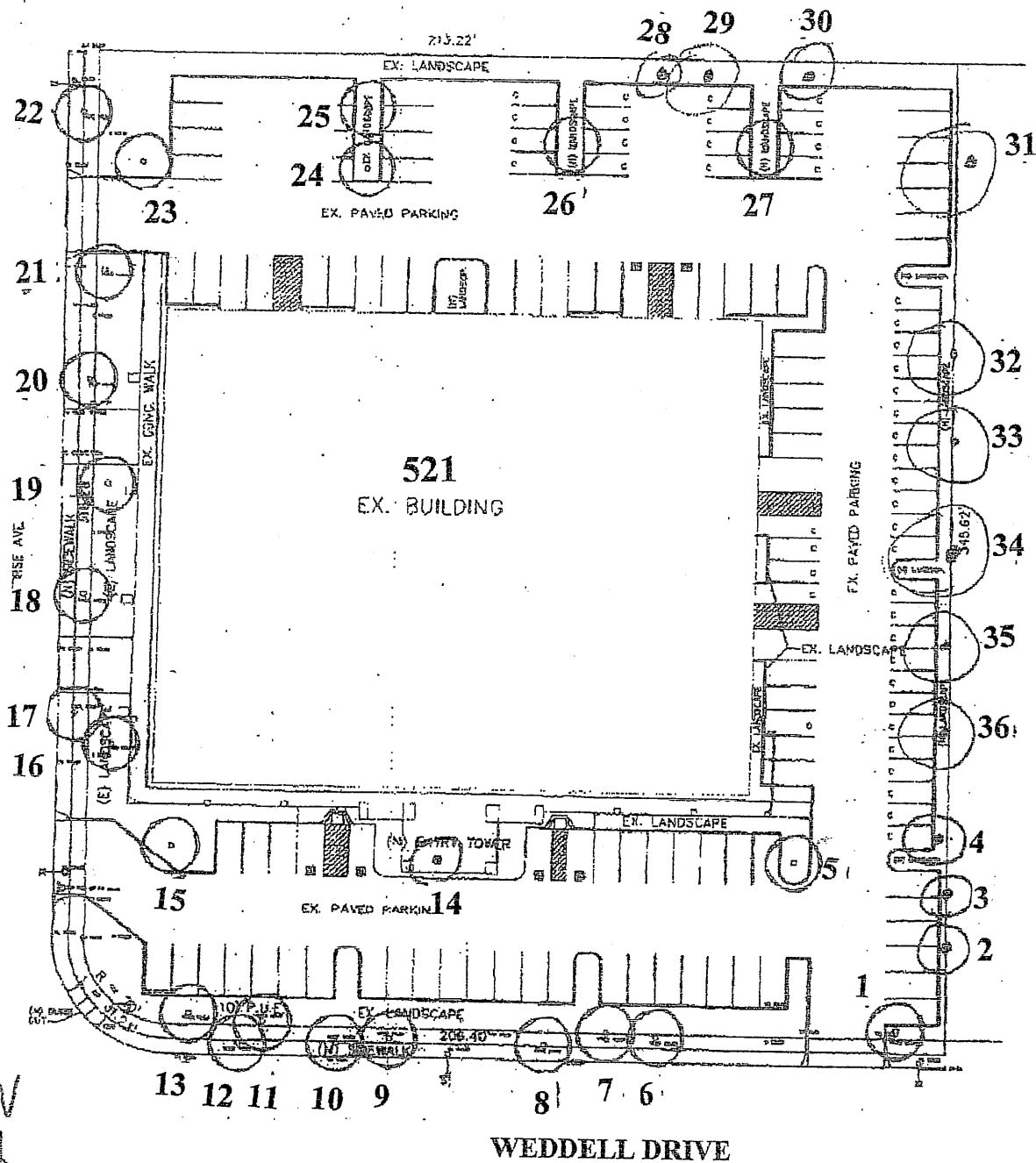
Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like medicine, cannot be guaranteed.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

*Barrie D. Coate*

Barrie D. Coate  
ISA Certified Arborist  
Horticultural Consultant





# HORTICULTURAL CONSULTANTS CONSULTING ARBORISTS



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Tree numbers correspond to evaluation charts.  
All dimensions and tree locations are approximate.

Evaluation of trees at the Southbay Christian Center

521 E. Weddell Drive, Sunnyvale

Requested by: Brian Pendley, Pendley & Associates


Prepared by: Michael L. Bench, Consulting Arborist

Date: August 4<sup>th</sup>, 2005

Job # 08-05-157 Site I

This logo is attached to a plan done by another professional. The presence of this logo is not for the purpose of claiming credit for the plan but merely to add horticultural or arboricultural information to a plan prepared by others.



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Tree #	Plant Name	Measurements						Condition			Pruning/Cabling Needs						Pest/Disease Problems					Recommend		Status															
1	Coast Redwood (152)	17	✓	14				DIAMETER @ 4 FEET	DBH	DBH	DIAMETER @ 2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	NEEDS WATER(1-5)	NEEDS FERTILIZER	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)	HERITAGE TREE?	PROTECTED TREE?			
	Sequoia sempervirens						50	30	1	3																													
2	Coast Redwood (151)	12					35	20	1	1																													
3	Coast Redwood (150)	11					35	20	2	1																													
4	Chinese Elm (149)	8	✓	5	3		30	35	1	2																													
	Ulmus parvifolia																																						
5	Chinese Elm (153)	18					30	60	3	2																													
6	Yarwood Sycamore	4.5					20	15	1	2																													
	Platanus acerifolia 'Yarwood'																																						
7	Yarwood Sycamore	2.5					10	10	2	2																													
8	Yarwood Sycamore	4					15	15	1	1																													
9	Yarwood Sycamore	7					20	25	1	2																													
10	Yarwood Sycamore (154)	9					30	30	1	2																													

Job Name: South Bay Christian Center, 521 E. Weddell, Sunnyvale  
Job #: 08-05-157  
Data: August 4th 2008

1 = Best, 5 = Worst



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Tree #		Plant Name		Measurements				Condition				Pruning/Cabling Needs							Pest/Disease Problems				Recommend		Status										
				DIAMETER @ 4 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @ 2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	NEEDS WATER(1-5)	NEEDS FERTILIZER	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)	HERITAGE TREE?	PROTECTED TREE?		
11	American Sweet Gum (155)	13						30	30		1	2																							
	Liquidambar styraciflua																																		
12	American Sweet Gum (156)	13						25	30		1	2																							
13	American Sweet Gum (157)	12						35	20		1	2																							
14	Crape Myrtle	2	✓	2				10	12		1	2																							
	Lagerstromia Indica				(x10)																														
15	Chinese Elm (158)	8						15	20		1	1																							
16	Coast Redwood (159)	31						85	30		1	1																							
17	Coast Redwood (160)	39						70	35		1	1																							
18	Coast Redwood	6						15	15		1	1																							
19	Chinese Elm (161)	16						25	50		1	3			4	4	4	4																	
20	American Sweet Gum (162)	17	✓	8				45	45		1	2																							


Job Name: South Bay Christian Center, 521 E. Weddell, Sunnyvale  
Job #: 08-05-157  
Date: August 4th, 2005

(#) = Number by previous survey

1 = Best, 5 = Worst



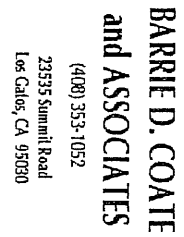
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21	American Sweet Gum (163)	16	✓	9	7		50	45	1	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</

Job Name: South Bay Christian Center, 521 E. Weddell, Sunnyvale  
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Trunk Formula Method  
9<sup>th</sup> Edition, Guide for Plant Appraisal  
for Trees Less Than 30" diameter

Owner of Property (tree):	SOUTHBAY CHRISTIAN CENTER		
Location:	521 E. WEDDELL, SUNNYVALE (SITE D)		
Date of Appraisal:	August 4 <sup>th</sup> , 2005	Date of Failure:	n/a
Appraisal Prepared for:	Brian Pendley, Pendley & Associates		
Appraisal Prepared by:	Michael L. Bench		
<i>Field Observations of Subject Tree</i>			
1. Species:	SEQUOIA SEMPERVIRENS, TREE #1		
2. Condition:	Good (75%)		
3. Trunk Diameter, Inches:	17 and 14 inches		
4. Location Value %:	Site <u>75</u> % + Contribution <u>80</u> % + Placement <u>85</u> % = <u>240</u> ÷ 3 = <u>80</u> %		
<i>Regional Plant Appraisal Committee Information</i>			
5. Species Rating:	<u>90</u> %		
6. Replacement Tree Size (sq. inches) TAR:	<u>19.6</u> in.		
7. Replacement Tree Cost:	\$ 902.50		
8. Installation Cost:	\$ 902.50		
9. Installed Tree Cost (# 7 + # 8):	\$1,805.00		
10. Unit Tree Species Cost (per sq. inches):	\$ 27.50 per in <sup>2</sup>		
<i>Calculations Using Field and Regional Committee Information</i>			
11. Appraised Trunk Area Trunk Diameter, Squared (#3) x 785 =	<u>304</u> sq. in.		
12. Appraised Tree Trunk Increase (TA <sub>INCR</sub> ) =  TA <sub>A</sub> <u>304</u> in. (#11) - TA <sub>R</sub> <u>19.6</u> sq. in. (#6) =	<u>284.4</u> sq. in.		
13. Basic Tree Cost: (TA <sub>INCR</sub> ) (#12) <u>284.4</u> sq. in. x UTC (#10) \$ <u>27.50</u> per sq. in.  + Installed Tree Cost (# 9) \$ <u>1,805</u>	= \$ <u>9,626.</u>		
14. Appraised Value: Basic Tree Cost (#13) \$ <u>9,626</u> x Species (#5)  <u>90</u> % x Condition (#2) <u>75</u> % x Location (#4) <u>80</u> % = \$	<u>5,198.</u>		
15. Round to nearest \$100 (\$5,000+) or \$10 (less than \$5,000)	= \$ <u>5,200</u>		

### Replacement Cost Method

$$\begin{aligned} \text{Appraised Value} &= (\text{Installed Plant Cost} \times \text{Species \%} \times \text{Condition \%} \times \text{Location \%}) \\ &\quad + \text{Removal and Cleanup Cost (if needed)} \\ \text{Installed Plant Cost} &= \text{Replacement Plant Cost} + \text{Installation Cost} \\ &\quad \text{-----} \end{aligned}$$

Property: **Southbay Christian Center, 521 E. Weddell Drive, Sunnyvale**  
Date: **August 4<sup>th</sup>, 2005** Appraiser: **Michael L. Bench**

#### Field Observations:

1. Species: *Platanus acerifolia* 'Yarwood' – Tree # 6
2. Condition 90 %
3. Trunk Circumference in/cm and/or Diameter 4.5 in/cm of  
Shrub or Vine Size (height/spread/volume)
4. Location % = (Site 75 % + contribution 80% + Placement 85%) ÷ 3 = 80%
5. Removal and Cleanup Costs for appraised  
plant or plant that will be replaced. = \$ 0

#### Regional Plant Appraisal Committee and/or Appraiser Developed or Modified Information

6. Species rating 90%
7. Replacement Plant Size (diameter) 4.0 in/cm
8. Replacement Cost = \$850
9. Installation Cost = \$1,275
10. Other Regional Information: 48" boxed Valley Crest Tree Company

#### Calculations by Appraiser Using Field and/or Regional Information

11. Installed Plant Cost = Plant Cost (#8) \$ 850  
+ Installation Cost (#9) \$ 1,275 = \$2,125
12. Adjusted Installed Plant Cost = Installed Plant  
Cost (#11) \$ 2,125 x Species rating (#6) 90% x  
Condition (#2) 90% x Location (#4) 80% = \$1,377
13. Add Removal and Cleanup Costs (#5) (if appraised  
plant is replaced) \$0 = \$ 0
14. The Appraised Value is either #12 or #13 = \$ 1,377
15. If the Appraised Value (#14) is \$5,000 or more, round  
it to the nearest \$100, if it is less, round it nearest \$10.
16. Appraised Value (#14) = \$1,380

\*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.

### Replacement Cost Method

$$\begin{aligned} \text{Appraised Value} &= (\text{Installed Plant Cost} \times \text{Species \%} \times \text{Condition \%} \times \text{Location \%}) \\ &\quad + \text{Removal and Cleanup Cost (if needed)} \\ \text{Installed Plant Cost} &= \text{Replacement Plant Cost} + \text{Installation Cost} \\ &\quad \text{-----} \end{aligned}$$

Property: **Southbay Christian Center, 521 E. Weddell Drive, Sunnyvale**  
Date: **August 4<sup>th</sup>, 2005** Appraiser: **Michael L. Bench**

#### Field Observations:

1. Species: *Platanus acerifolia* 'Yarwood' – Tree # 7
2. Condition 75 %
3. Trunk Circumference in/cm and/or Diameter 2.5 in/cm of  
Shrub or Vine Size (height/spread/volume)
4. Location % = (Site 75 % + contribution 80% + Placement 85%) ÷ 3 = 80%
5. Removal and Cleanup Costs for appraised  
plant or plant that will be replaced. = \$ 0

#### Regional Plant Appraisal Committee and/or Appraiser Developed or Modified Information

6. Species rating 90%
7. Replacement Plant Size (diameter) 2.0 in/cm
8. Replacement Cost = \$150
9. Installation Cost = \$225
10. Other Regional Information: 48" boxed Valley Crest Tree Company

#### Calculations by Appraiser Using Field and/or Regional Information

11. Installed Plant Cost = Plant Cost (#8) \$ 150  
+ Installation Cost (#9) \$ 225 = \$375
12. Adjusted Installed Plant Cost = Installed Plant  
Cost (#11) \$ 375 x Species rating (#6) 90% x  
Condition (#2) 75% x Location (#4) 80% = \$203
13. Add Removal and Cleanup Costs (#5) (if appraised  
plant is replaced) \$0 = \$ 0
14. The Appraised Value is either #12 or #13 = \$ 203
15. If the Appraised Value (#14) is \$5,000 or more, round  
it to the nearest \$100, if it is less, round it nearest \$10.
16. Appraised Value (#14) = \$200

\*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.



### Replacement Cost Method

$$\begin{aligned} \text{Appraised Value} &= (\text{Installed Plant Cost} \times \text{Species \%} \times \text{Condition \%} \times \text{Location \%}) \\ &\quad + \text{Removal and Cleanup Cost (if needed)} \\ \text{Installed Plant Cost} &= \text{Replacement Plant Cost} + \text{Installation Cost} \\ &\quad \text{-----} \end{aligned}$$

Property: **Southbay Christian Center, 521 E. Weddell Drive, Sunnyvale**  
Date: **August 4<sup>th</sup>, 2005** Appraiser: **Michael L. Bench**

#### Field Observations:

1. Species: *Platanus acerifolia* 'Yarwood' – Tree # 8
2. Condition 100 %
3. Trunk Circumference in/cm and/or Diameter 4.0 in/cm of  
Shrub or Vine Size (height/spread/volume)
4. Location % = (Site 75 % + contribution 80% + Placement 85%) ÷ 3 = 80%
5. Removal and Cleanup Costs for appraised  
plant or plant that will be replaced. = \$ 0

#### Regional Plant Appraisal Committee and/or Appraiser Developed or Modified Information

6. Species rating 90%
7. Replacement Plant Size (diameter) 4.0 in/cm
8. Replacement Cost = \$850
9. Installation Cost = \$1,275
10. Other Regional Information: 48" boxed Valley Crest Tree Company

#### Calculations by Appraiser Using Field and/or Regional Information

11. Installed Plant Cost = Plant Cost (#8) \$ 850  
+ Installation Cost (#9) \$ 1,275 = \$2,125
12. Adjusted Installed Plant Cost = Installed Plant  
Cost (#11) \$ 2,125 x Species rating (#6) 90% x  
Condition (#2) 100% x Location (#4) 80% = \$1,530
13. Add Removal and Cleanup Costs (#5) (if appraised  
plant is replaced) \$0 = \$ 0
14. The Appraised Value is either #12 or #13 = \$ 1,530
15. If the Appraised Value (#14) is \$5,000 or more, round  
it to the nearest \$100, if it is less, round it nearest \$10.
16. Appraised Value (#14) = **\$1,530**

\*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.

### Replacement Cost Method

$$\begin{aligned} \text{Appraised Value} &= (\text{Installed Plant Cost} \times \text{Species \%} \times \text{Condition \%} \times \text{Location \%}) \\ &\quad + \text{Removal and Cleanup Cost (if needed)} \\ \text{Installed Plant Cost} &= \text{Replacement Plant Cost} + \text{Installation Cost} \\ &\quad \text{-----} \end{aligned}$$

Property: **Southbay Christian Center, 521 E. Weddell Drive, Sunnyvale**  
Date: **August 4<sup>th</sup>, 2005** Appraiser: **Michael L. Bench**

#### Field Observations:

1. Species: *Lagerstromia indica* – Tree # 14
2. Condition 100 %
3. Trunk Circumference in/cm and/or Diameter 2 (x10) in/cm of  
Shrub or Vine Size (height/spread/volume) 10' x 10'
4. Location % = (Site 75 % + contribution 80% + Placement 85%) ÷ 3 = 80%
5. Removal and Cleanup Costs for appraised  
plant or plant that will be replaced. = \$ 0

#### Regional Plant Appraisal Committee and/or Appraiser Developed or Modified Information

6. Species rating 70%
7. Replacement Plant Size (diameter) 2" (x4) in/cm
8. Replacement Cost = \$850
9. Installation Cost = \$1,275
10. Other Regional Information: 48" boxed Valley Crest Tree Company

#### Calculations by Appraiser Using Field and/or Regional Information

11. Installed Plant Cost = Plant Cost (#8) \$ 850  
+ Installation Cost (#9) \$ 1,275 = \$2,125
12. Adjusted Installed Plant Cost = Installed Plant  
Cost (#11) \$ 2,125 x Species rating (#6) 70% x  
Condition (#2) 100% x Location (#4) 80% = \$1,190
13. Add Removal and Cleanup Costs (#5) (if appraised  
plant is replaced) \$0 = \$ 0
14. The Appraised Value is either #12 or #13 = \$ 1,190
15. If the Appraised Value (#14) is \$5,000 or more, round  
it to the nearest \$100, if it is less, round it nearest \$10.
16. Appraised Value (#14) = \$1,190

\*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.